**Lesson #5 Research Skills**

This page should be repeated for each individual lesson that makes up the unit.

**Problem statement:** How can I leverage my access to research to:

* test my existing assumptions and developing understanding
* build new understanding
* select trustworthy source material

**Learning objectives:**

* Effectively use online search engines to identify relevant data
* Accurately assess the credibility of a variety of sources

**Lesson standards (NGSS, CCSS, CTE):**

[CCSS.ELA-Literacy.RL.9-10.1](http://www.corestandards.org/ELA-Literacy/RL/9-10/1/)

Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.

[CCSS.ELA-Literacy.RL.9-10.6](http://www.corestandards.org/ELA-Literacy/RL/9-10/6/)

Analyze a particular point of view or cultural experience reflected in a work of literature from outside the United States, drawing on a wide reading of world literature.

[CCSS.ELA-Literacy.W.9-10.1](http://www.corestandards.org/ELA-Literacy/W/9-10/1/)

Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.

[CCSS.ELA-Literacy.W.9-10.7](http://www.corestandards.org/ELA-Literacy/W/9-10/7/)

Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.

[CCSS.ELA-Literacy.W.9-10.8](http://www.corestandards.org/ELA-Literacy/W/9-10/8/)

Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the usefulness of each source in answering the research question; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and following a standard format for citation.

[CCSS.ELA-Literacy.L.9-10.1](http://www.corestandards.org/ELA-Literacy/L/9-10/1/)

Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

[CCSS.ELA-Literacy.L.9-10.2](http://www.corestandards.org/ELA-Literacy/L/9-10/2/)

Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.

[CCSS.ELA-Literacy.SL.9-10.1](http://www.corestandards.org/ELA-Literacy/SL/9-10/1/)

Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 9-10 topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively.

[CCSS.ELA-Literacy.SL.9-10.2](http://www.corestandards.org/ELA-Literacy/SL/9-10/2/)

Integrate multiple sources of information presented in diverse media or formats (e.g., visually, quantitatively, orally) evaluating the credibility and accuracy of each source.

[CCSS.ELA-Literacy.SL.9-10.4](http://www.corestandards.org/ELA-Literacy/SL/9-10/4/)

Present information, findings, and supporting evidence clearly, concisely, and logically such that listeners can follow the line of reasoning and the organization, development, substance, and style are appropriate to purpose, audience, and task.

**Soft skills:**

Critical thinking - Analyze language found in sources to identify persuasive techniques (ethos, pathos, logos) and biased language (diction, figurative language)

Media Literacy - Understand the media landscape (major media outlets and companies) and

**Locally and/or personally relevant for students:**

Students are surrounded by media at all times, through their phones, televisions, laptops, smart watches, billboards, clothing, etc. The modern tendency towards quick, short bursts of information via Twitter, fr example, discourages the in-depth thinking required to fully assess a source’s credibility. Thus, students are more susceptible to propaganda, whether it be from teachers, politicians, friends, companies, etc.

**Connections to career and educational pathways:**

Assessing the credibility of claims and the evidence they rest upon as it relates

**Materials:**

Shared handouts and student practice sheets attached below lesson. Need projection and/or document camera, depending on preference.

**Lesson preparation:** Students are expected to have completed lessons 1-4 in this series. Instructor must be familiar with checklist questions, and must have carefully reviewed the sample material to guide students as they work.

**Time required:** ~75 minutes

**Grouping of students for instruction:**

Recommend small groups of 4-6 students to allow group discussion and partner support in a small, safe environment. Ideally, students will know their table mates from previous interactions so they will be more comfortable tackling issues presented in the lesson together.

**What is the instruction? Consider the PBL Procedure that is being addressed here:** Students are understanding and exploring the problem by examining real life examples of bias in media.

**Understanding & Exploring the Problem**

|  |  |
| --- | --- |
| **Teacher** | **Student** |
| Ask students to offer summaries of main ideas from past lessons, including the power of language and media to influence. Solicit a few students responses | Sharing & listening |
| Spectacularly seamless segue to the upcoming research project, during which students will conduct research by gathering evidence.  Emphasize the importance of credible evidence as the foundation of a sound argument, perhaps compare it to the foundation of a home or building. | Listening |
| Introduce the credibility overview assignment - pass out copies & read through instructions.  Walk through examples 1 and 2 with students as they follow along. Take questions as they arise. | Following along, asking questions |
| Instruct small groups to work together on the first practice. Walk around and monitor progress.  When most have finished and all have some done (5-15m), solicit responses from the class and take questions as they arise. Be careful to correct misconceptions, such as what counts as “sufficient evidence” or what constitutes a “reputable” institution | Analyze source, collaborate to assess credibility |
| Instruct students to silently and individually work on the second practice. After most students have finished, instruct students to share at table groups.  Solicit responses and discuss as a class | Analyze source, assess credibility, discuss, collaborate |
| Instruct students to keep these sheets as guidelines | Organize their papers |

**Accommodations:** Mixed ability groups is best (though groups should be well-acquainted, so this will already be in place). Graphic organizers featured in handouts and appropriate grouping will assist ELL and SPED students.

**Extensions:** Time permitting, before sharing out as a class, have table groups compare answers on the practice assignments. Then discuss similarities and differences as a class, encouraging students to defend their position regarding credibility.

**Assessment:**

Teacher should circulate during group work time and challenge individuals and groups to defend their responses to checklist questions (especially answers that may be incorrect or less accurate).

**Formative Assessment in the Lessons**

Checklist accuracy on practice worksheets

**Summative Assessment for the Unit**

Group research project will rely heavily on sources gathered by students. Sources must be credible to support a string project.

**References/Resources:** Instructional plan created by Casey Rummel

**Assessing the Credibility of Sources**

These examples use the guiding questions in the checklist at the right to analyze whether or not each of the following persuasive sources is or is not credible. Review these examples in preparation for practicing on your own. Eventually, you will use this template to assess the credibility of sources you find on your own.

Use this key to help you understand the symbols used when answering checklist questions:

|  |  |  |  |
| --- | --- | --- | --- |
| 🗹 = yes | ☒ = no | ~ = somewhat | * = not enough info |

**Example 1**

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| --- | --- | --- |
| **Source title & description** | **Sample text** | **Checklist** |
| The American Freedom Party (AKA 3rd Position Party) is a political party.    afreedomparty.us      The logo of the Third Position Party says “A Political Party for White Americans.” | **One quote reads:**  “The final data for the year 2014 has just been published by the Centers for Disease Control and Prevention, “Births: Final Data for 2014.” [1] It shows a continuation of trends that have tracked falling total fertility rates for Black, Hispanic and Native Americans. The demographic data for these groups continue to show a steady erosion. White and Asian total fertility rates are up...”    **Another quote from an article on their site reads:**  “Immigration is a weapon our elites use to reshape the demographic destiny of our country. A key part of this program of White displacement is to convince Whites that immigration does not matter: that Whites are going to disappear because of low fertility, and that we all should simply give up and stop fighting the further inundation of peoples from around the world into our traditional homelands.” | 🗹 Is the author listed?  ☒ Is the author or publishing institution reputable?  ~ Is the claim supported by evidence?  ~ Is evidence cited?  ☒ Is there enough evidence to be convincing?  ☒ Is the evidence high quality?   * Is the source timely?   ☒ Neutral language?  ☒ Unbiased tone?  ☒Does the author consider alternative perspectives? |
| **Conclusion & Analysis** | | |
| The logo suggests that other racial groups would be excluded from joining the party, which is clearly racist. The first quote is a summary of evidence from the CDC (Center for Disease Control) - which is a reputable source. This may lead the reader to believe the source as a whole is reliable. However, the claim made in the second quote is not supported by the evidence provided in the first quote. Thus, the overall message is of the article is not trustworthy because it is not based on clear evidence. The second quote suggests a distorted view of immigration and an unsubstantiated claim that people in power are using immigration to bring the white “race” to an end. The word “inundation” is an example of biased language; inundate means “overwhelm.” To claim that immigrants are overwhelming the country suggests that immigrants are a problem that need to be solved, which is a biased perspective that the author does not support with evidence. It seems that this website is aimed at people who already agree with the author’s position. This is clearly racist propaganda. | | |

**Example 2**

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| --- | --- | --- |
| **Source title & description** | **Sample text** | **Checklist** |
| Article from “The Atlantic” website titled“How Immigrants Fit Into America's Economy, Now and 100 Years Ago”    Published Jan. 24, 2016 | “A new paper from the [National Bureau of Economic Research](http://www.nber.org/papers/w21882) compares immigrant pools in the past to the present to determine what has changed about the groups of people destined for a new life in the U.S., and what happens once they arrive.    The study’s authors, Ran Abramitzky of Stanford University and Leah Platt Boustan of UCLA, focus on two specific waves of immigrants: Those who arrived in the U.S. between 1850 and 1920, and those who have arrived in the past few decades…    “The paper analyzes immigrant selectivity by sorting out two main groups. Positive selection happens when immigrants entering the U.S. from a particular country are generally those with high levels of skill and education. They leave because they are in high-demand in America, and can easily find jobs and earn a good wage. Negative selection happens when immigrants with low-skill levels are the primary groups leaving a country…    In the present day, a higher proportion of immigrants are positively selected. That points to systematically-provided incentives mainly targeted at wealthier, more educated workers, the paper finds.” | 🗹 Is the author listed?  🗹 Is the author or publishing institution reputable?  🗹 Is the claim supported by evidence?  🗹 Is evidence cited?  🗹 Is there enough evidence to be convincing?  🗹 Is the evidence high quality?  🗹 Is the source timely?  🗹 Neutral language?  🗹 Unbiased tone?  🗹 Does the author consider alternative perspectives? |
| **Conclusion & Analysis** | | |
| This article is clear and direct. The author is listed and the evidence is clearly cited. The author is explaining the finding of a study conducted by researchers from reputable institutions (UCLA and Stanford). Unlike the first example, this author is not making any claims that are not supported by evidence. Instead, this author is summarizing a source in a neutral, unbiased way. The reader is not forced to believe the author; if they doubt any of the findings described in the article, they can find the study themselves. The language used is descriptive and neutral - not emotional - suggesting a lack of bias. None of the statements reveal any obvious bias. The article was published less than a week ago, so the information is very timely. | | |

**Credibility of Sources Practice 1**

Assess the credibility of the following source, using the checklist as a guide. Be sure to explain thoroughly in the conclusion & analysis section.

Use these symbols when answering checklist questions:

|  |  |  |  |
| --- | --- | --- | --- |
| 🗹 = yes | ☒ = no | ~ = somewhat | * = not enough info |

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| **Source title & description** | **Sample text pulled from the source** | **Checklist** |
| **article titled”If UFOs are real, shouldn't they produce some real physical effects?”**    <http://www.ufoevidence.org/documents/doc616.htm>    Text of a speech given in front of Congress in 1968 by James McDonald | “Do UFOs exist? Again, the answer is that they do. There are rather well-authenticated cases spanning a wide variety of "physical effects." Car-stopping cases are one important class. UFOs have repeatedly been associated with ignition failures and light-failures of cars and trucks which came near UFOs or near which the UFOs moved. I would estimate that one could assemble a list of four or five dozen such instances from various parts of the world. Interference with radios and TV receptions have been reported many times in connection with UFO sightings. There are instances where UFOs have been reported as landing, and after departure, holes in the ground, or depressions in sod or disturbed vegetation patterns have been described. In many such instances, the evident reliability of the witnesses is high, the likelihood of hoax or artifice small. A limited number of instances of residues left behind are on record, but these are not backed up by meaningful laboratory analyses, unfortunately.” | * Is the author listed? * Is the author or publishing institution reputable? * Is the claim supported by evidence? * Is evidence cited? * Is there enough evidence to be convincing? * Is the evidence high quality? * Is the source timely? * Neutral language? * Unbiased tone? * Does the author consider alternative perspectives? |
| **Conclusion & Analysis - trustworthy or not? Why?** | | |
|  | | |

**Credibility of Sources Practice 2**

**Instructions:** Assess the credibility of the following source, using the checklist as a guide. Be sure to explain thoroughly in the conclusion & analysis section.

Use these symbols when answering checklist questions:

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| 🗹 = yes | ☒ = no | ~ = somewhat | * = not enough info |

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| **Source title & description** | **Sample text** | **Checklist** |
| **Article titled “The United Nations Exposes Chemtrails 100% PROOF We Are Being Poisoned”**    **from topinfopost.com**    **No author listed** | By now everyone has witnessed streaks of white trailing across the sky, stretching from horizon to horizon, ultimately turning the skies into a murky haze. We can no longer ignore the fact that our skies are being heavily polluted with aluminium, barium, lead, arsenic, chromium, cadmium, selenium, and silver. All of which attribute to a host of health problems including: neurological effects, heart damage, eyesight issues, reproduction failures, immune system damage, gastrointestinal disorders, damaged kidney, damaged liver, hormonal problems, and more.    The truth is the government is spraying deadly chemtrails in hopes of population reduction. Furthermore they have been known to use chemtrails as biological testing agents on the populace; all while claiming they are nothing more than mere vapor. | * Is the author listed? * Is the author or publishing institution reputable? * Is the claim supported by evidence? * Is evidence cited? * Is there enough evidence to be convincing? * Is the evidence high quality? * Is the source timely? * Neutral language? * Unbiased tone? * Does the author consider alternative perspectives? |
| **Conclusion & Analysis** | | |
|  | | |

**Credibility of Sources assignment**

**You must check the credibility of two of your sources, minimum.**

|  |  |  |
| --- | --- | --- |
| **Source title & description (not a video or autobiography)** | **Sample text** | **Checklist** |
|  |  | * Is the author listed? * Is the author or publishing institution reputable? * Is the claim supported by evidence? * Is evidence cited? * Is there enough evidence to be convincing? * Is the evidence high quality? * Is the source timely? * Neutral language? * Unbiased tone? * Does the author consider alternative perspectives? |
| **Conclusion & Analysis** | | |
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| --- | --- | --- |
| **Source title & description (not a video or autobiography)** | **Sample text** | **Checklist** |
|  |  | * Is the author listed? * Is the author or publishing institution reputable? * Is the claim supported by evidence? * Is evidence cited? * Is there enough evidence to be convincing? * Is the evidence high quality? * Is the source timely? * Neutral language? * Unbiased tone? * Does the author consider alternative perspectives? |
| **Conclusion & Analysis** | | |
|  | | |